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| 10/064,709      | 08/08/2002  | Nicola Scioscia      | 56162.000349        | 1885             |

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EXAMINER

DUONG, FRANK

ART UNIT PAPER NUMBER

2616

DATE MAILED: 04/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/064,709

Applicant(s)

SCIOSCIA, NICOLA

Examiner

Frank Duong

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 August 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 and 28-31 is/are rejected.
- 7) ☒ Claim(s) 27 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 August 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. This Office Action is a response to communications dated 08/08/02. Claims 1-31 are pending in the application.

#### ***Information Disclosure Statement***

2. The information disclosure statement filed 02/06/03 complies with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609. It has been considered and placed in the application file.

#### ***Claim Objections***

3. Claim 14 is objected to because of the following informalities:

As per claim 14, the term "are to" on lines 8, 10 and 12 should read --to--.

Appropriate correction is required.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Czajkowski et al (USP 6,522,647) (hereinafter "Czajkowski").

Regarding **claim 1**, in accordance with Czajkowski reference entirety, Czajkowski discloses a system (*Fig. 2, col. 5, line 31 to col. 7, line 55*) for providing symmetrical connectivity (*VoDSL is a symmetrical connectivity*) between at least two consumer premises equipment telecommunications devices ((4a and 4b) or (24a and 24b) or (CPE 2 at originating and terminating (not shown; inherent) sites of Fig. 2)), comprising:

at least two consumer premises equipment telecommunications devices operatively connected over an asynchronous transfer mode telecommunications network (*22 or xDSL network or Fig. 2*), wherein the at least two consumer premises equipment telecommunications devices are configured to perform local tone generation, local tone detection and decoding, and direct transfer and decoding of dialed digits (*col. 5, line 50 to col. 6, line 48, Czajkowski discloses interfaces 24a and 24b converts analog voice and DTMF dialing signals from the subscriber's voice phones 4a and 4b into ATM cells and the BORSCHT circuit provides physical interface to a standard analog telephone handset including tone generating, and tone detecting and decoding in a manner as recited in the claim*).

Regarding **claim 2**, in addition to features recited in base claim 1 (see rationales discussed above), Czajkowski further discloses wherein the at least two consumer premises equipment telecommunications devices are further configured to generate, exchange and decode state transition signaling messages (*enhanced services*) (*col. 7, lines 10-64, Czajkowski discusses the implementation of API 55 in the CPE 2 to provide*

*enhanced services not available on standard VoDSL CPE 2 to include call waiting, e-mail alert etc.... as listed in col. 9, lines 5-19 and thereafter).*

Regarding **claim 3**, in addition to features recited in base claim 2 (see rationales discussed above), Czajkowski further discloses wherein the state transition signaling messages are transported using channel associated signaling (CAS) secondary service packets (*col. 5, lines 50-53, Czajkowski discloses interfaces 24a and 24b convert dialing signals (CAS) from phones 4a and 4b into ATM cells (packets) for a virtual circuit (transported).*

Regarding **claim 4**, in addition to features recited in base claim 3 (see rationales discussed above), Czajkowski further discloses wherein the channel associated signaling secondary service packets comprise 8 bytes of information (*col. 5, lines 50-53, Czajkowski discloses interfaces 24a and 24b convert dialing signals (CAS) from phones 4a and 4b into ATM cells (packets) for a virtual circuit (transported). Moreover, the eight bytes of information are inherent since CAS is an eight bytes signaling info in E1 frame).*

Regarding **claim 5**, in addition to features recited in base claim 3 (see rationales discussed above), Czajkowski further discloses wherein the channel associated signaling secondary service packets include a channel identification value (CID) and a connection identification value (LLC) (*col. 5, lines 50-53, Czajkowski discloses interfaces 24a and 24b convert dialing signals (CAS) from phones 4a and 4b into ATM cells (packets) for a virtual circuit (transported), specifically ATM AAL2 cells because the AAL2 transceiver 50 is depicted in Fig. 2. It is inherent there are CID and LLC in the AAL2 cells).*

Regarding **claim 6**, in addition to features recited in base claim 1 (see rationales discussed above), Czajkowski further discloses wherein the at least two consumer premises equipment telecommunications devices are further configured to generate, exchange and decode dialed digit packets, wherein the dialed digit packets represent numbers dialed on at least one of the consumer premises equipment telecommunications devices (4a and 4b) (*col. 5, line 50 to col. 6, line 22*).

Regarding **claim 7**, in addition to features recited in base claim 6 (see rationales discussed above), Czajkowski further discloses wherein the dialed digit packets comprise 8 bytes of information (*col. 5, lines 50-53, Czajkowski discloses interfaces 24a and 24b convert dialing signals (DTMF) from phones 4a and 4b into ATM cells (packets) for a virtual circuit (transported). Moreover, the nine bytes of information are inherent since DTMF is a nine bytes signaling info*).

Regarding **claim 8**, in addition to features recited in base claim 6 (see rationales discussed above), Czajkowski further discloses wherein the dialed digit packets include a channel identification value (CID) and a connection identification value (LLC) (*col. 5, lines 50-53, Czajkowski discloses interfaces 24a and 24b convert dialing signals (DTMF) from phones 4a and 4b into ATM cells (packets) for a virtual circuit (transported), specifically ATM AAL2 cells because the AAL2 transceiver 50 is depicted in Fig. 2. It is inherent there are CID and LLC in the AAL2 cells*).

Regarding **claim 9**, in addition to features recited in base claim 1 (see rationales discussed above), Czajkowski further discloses wherein each of the at least two consumer premises equipment telecommunications devices further comprise a state

machine (*Fig. 2; elements 25 and 60*) for transitioning each of the at least two consumer premises equipment telecommunications devices into a plurality of operational states triggered by a plurality of events (*col. 7, lines 10-64, Czajkowski discusses the implementation of API 55 in the CPE 2 to provide enhanced services not available on standard VoDSL CPE 2 to include call waiting, e-mail alert etc.... as listed in col. 9, lines 5-19 and thereafter*).

Regarding **claims 10-13**, in addition to features recited in base claim 9 (see rationales discussed above), Czajkowski further discloses wherein the plurality of operational states include an ONHOOK state, an OFFHOOK state; a DIALTONE state, a RINGING state, a RINGBACK state, and a TALKING state ...etc, (*the functionalities of control processor 25 are discussed at col. 6, lines 29-35 to include hook switch events on phones 4, receiving ringing messages from the exchange and signal to BORCHT circuit to providing a ringing signal phone 4 is called. The recitation thereat clearly anticipated the claimed limitations in a manner as recited*).

(*claims 14-26 call for a method comprising the steps mirrored the system claims 1-13. Thus, they are rejected by the same rationales discussed above*)

Regarding **claim 14**, in accordance with Czajkowski reference entirety, Czajkowski discloses a method (*Fig. 2, col. 5, line 31 to col. 7, line 55*) for providing symmetrical connectivity (*VoDSL is a symmetrical connectivity*) between at least two consumer premises equipment telecommunications devices, comprising the steps of:

operatively connected at least two consumer premises equipment telecommunications devices over an asynchronous transfer mode telecommunications network; configuring the at least two consumer premises equipment telecommunications devices are to perform local tone generation; configuring the at least two consumer premises equipment telecommunications devices to perform local tone detection and decoding; and configuring the at least two consumer premises equipment telecommunications devices to perform direct transfer and decoding of dialed digits (*col. 5, line 50 to col. 6, line 48, Czajkowski discloses interfaces 24a and 24b converts analog voice and DTMF dialing signals from the subscriber's voice phones 4a and 4b into ATM cells and the BORSCHT circuit provides physical interface to a standard analog telephone handset including tone generating, and tone detecting and decoding in a manner as recited in the claim*).

Regarding **claim 15**, in addition to features recited in base claim 14 (see rationales discussed above), Czajkowski further discloses the step of configuring the at least two consumer premises equipment telecommunications devices to generate, exchange and decode state transition signaling messages (*enhanced services*) (*col. 7, lines 10-64, Czajkowski discusses the implementation of API 55 in the CPE 2 to provide enhanced services not available on standard VoDSL CPE 2 to include call waiting, e-mail alert etc.... as listed in col. 9, lines 5-19 and thereafter*).

Regarding **claim 16**, in addition to features recited in base claim 15 (see rationales discussed above), Czajkowski further discloses the step of transporting the state transition signaling messages using channel associated signaling (CAS)



secondary service packets (*col. 5, lines 50-53, Czajkowski discloses interfaces 24a and 24b convert dialing signals (CAS) from phones 4a and 4b into ATM cells (packets) for a virtual circuit (transported).*

Regarding **claim 17**, in addition to features recited in base claim 16 (see rationales discussed above), Czajkowski further discloses wherein the channel associated signaling secondary service packets comprise 8 bytes of information (*col. 5, lines 50-53, Czajkowski discloses interfaces 24a and 24b convert dialing signals (CAS) from phones 4a and 4b into ATM cells (packets) for a virtual circuit (transported).* Moreover, *the eight bytes of information are inherent since CAS is an eight bytes signaling info in E1 frame).*

Regarding **claim 18**, in addition to features recited in base claim 16 (see rationales discussed above), Czajkowski further discloses wherein the channel associated signaling secondary service packets include a channel identification value (CID) and a connection identification value (LLC) (*col. 5, lines 50-53, Czajkowski discloses interfaces 24a and 24b convert dialing signals (CAS) from phones 4a and 4b into ATM cells (packets) for a virtual circuit (transported), specifically ATM AAL2 cells because the AAL2 transceiver 50 is depicted in Fig. 2. It is inherent there are CID and LLC in the AAL2 cells).*

Regarding **claim 19**, in addition to features recited in base claim 14 (see rationales discussed above), Czajkowski further discloses the step of configuring the at least two consumer premises equipment telecommunications devices to generate, exchange and decode dialed digit packets, wherein the dialed digit packets represent

numbers dialed on at least one of the consumer premises equipment telecommunications devices (4a and 4b) (*col. 5, line 50 to col. 6, line 22*).

Regarding **claim 20**, in addition to features recited in base claim 19 (see rationales discussed above), Czajkowski further discloses wherein the dialed digit packets comprise 8 bytes of information (*col. 5, lines 50-53, Czajkowski discloses interfaces 24a and 24b convert dialing signals (DTMF) from phones 4a and 4b into ATM cells (packets) for a virtual circuit (transported)*). Moreover, *the nine bytes of information are inherent since DTMF is a nine bytes signaling info*).

Regarding **claim 21**, in addition to features recited in base claim 19 (see rationales discussed above), Czajkowski further discloses wherein the dialed digit packets include a channel identification value (CID) and a connection identification value (LLC) (*col. 5, lines 50-53, Czajkowski discloses interfaces 24a and 24b convert dialing signals (DTMF) from phones 4a and 4b into ATM cells (packets) for a virtual circuit (transported), specifically ATM AAL2 cells because the AAL2 transceiver 50 is depicted in Fig. 2. It is inherent there are CID and LLC in the AAL2 cells*).

Regarding **claim 22**, in addition to features recited in base claim 14 (see rationales discussed above), Czajkowski further discloses the step of transitioning each of the at least two consumer premises equipment telecommunications devices into a plurality of operational states triggered by a plurality of events (*col. 7, lines 10-64, Czajkowski discusses the implementation of API 55 in the CPE 2 to provide enhanced services not available on standard VoDSL CPE 2 to include call waiting, e-mail alert etc.... as listed in col. 9, lines 5-19 and thereafter*).

Regarding **claims 23-26**, in addition to features recited in base claim 22 (see rationales discussed above), Czajkowski further discloses wherein the plurality of operational states include an ONHOOK state, an OFFHOOK state; a DIALTONE state, a RINGING state, a RINGBACK state, and a TALKING state ...etc, *(the functionalities of control processor 25 are discussed at col. 6, lines 29-35 to include hook switch events on phones 4, receiving ringing messages from the exchange and signal to BORCHT circuit to providing a ringing signal phone 4 is called. The recitation thereat clearly anticipated the claimed limitations in a manner as recited).*

5. Claims 28-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Hagirahim et al (USP 6,771,763) (hereinafter "Hagirahim").

*(note: claim 28 direct to the setup process steps 502 504, 506, 508 and 510) of Fig. 5)*

Regarding **claim 28** in accordance with Hagirahim reference entirety, Hagirahim discloses a method (*Fig. 5 and col. 5, line 14 to col. 6, line 60*) for providing symmetrical connectivity (VoDSL) between at least two consumer premises equipment telecommunications devices (*Fig. 5; 110 and 210*), comprising the steps of:

receiving, at a first consumer premises equipment telecommunications device, a going offhook local event (*col. 5, lines 14-17*);

transitioning the first consumer premises equipment telecommunications device into a DIALTONE state (*col. 5, lines 17-21*);

transmitting dialed digit packets representative of the second consumer premises equipment telecommunications device from the first consumer premises equipment

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telecommunications device to a second consumer premises equipment

telecommunications device operatively connected to the first consumer premises

equipment telecommunications device (*col. 5, lines 22-41*); and

determining whether the second consumer premises equipment

telecommunications device is in an ONHOOK state (*col. 5, lines 42-43 and thereafter*).

Regarding **claim 29**, it directs to the connection process steps 512, 514, 516, 518, 520, 522, 524, 526 and 528). Thus, it is anticipated by the Hagirahim reference of Fig. 5 as discussed above.

As per **claim 30**, please refer to disconnecting steps 536-546 of Fig. 5.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hagirahim.

Regarding **claim 31**, in addition to features recited in base claim 28 (see rationales discussed above), Hagirahim fails to further disclose the event steps when the destination CPE is busy or offhook to include transmitting a BUSY signal to the originating CPE and transitioning the originating CPE into an OFFHOOK state. However, these steps are well known in a standard telephone system and implementing them into Hagirahim's method would have been obvious to a skilled artisan.

Thus, it would have been obvious to those skilled in the art to implementing a standard feedback signal to inform the originating CPE that the destination CPE is busy to provide the originating CPE a convenient way knowing the destination CPE's busy status so the originating CPE can gracefully terminates the call attempt or place the originating CPE OFFHOOK.

***Allowable Subject Matter***

7. Claim 27 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record, considered individually or in combination, fails to fairly show or suggest the claimed invention of base claim 26 and further limit with novel and unobvious limitations of transitional states as recited in the claim that clearly reflect the state machine of Fig. 3 of the instant application.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nodoushani et al (USP 6,563,816).

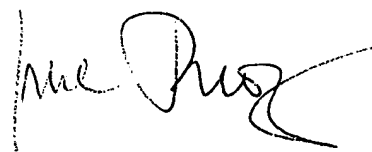
DSL Forum TR-036, Requirements for Voice over DSL, Version 1.0, pages 1-41, August 2000.

AF-VTOA-0113.000, ATM Trunking using AAL2 for Narrowband Services, pages 1-52, February 1999.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Duong whose telephone number is 571-272-3164. The examiner can normally be reached on 7:00AM-3:30PM, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on 571-272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Frank Duong', with a stylized flourish at the end.

**FRANK DUONG**  
**PRIMARY EXAMINER**

April 21, 2006